BAUS Endourology fellowship report- Visit to Sri Lanka and India

Sri Lanka 31st July- 21st August 2018

Kandy- General Teaching Hospital, Government hospital, Dr Manjula Herath and Dr Kanchana Edirisinghe

Columbo- Columbo South Teaching Hospital, Kalubowila, Government University Hospital-Professor Srinath Chandrasekera

Primary aim- acquire hands on experience to learn PCNL access and to gain greater operative experience of open benign cases

Secondary aim- Develop strategies to deal with intra operative complications with percutaneous stone surgery and open cases. To gain experience of working in a different healthcare system to the NHS and to appreciate different working conditions and practices.

Teaching Hospital Kandy is the second largest Government hospital in Sri Lanka. At the last count it has approximately 2300 beds. It has close links to the University of Peradeniya and has a well-established undergraduate and post graduate training programme. It is also a tertiary centre for stone surgery due to the specialist interests of the 2 dynamic Urologists Dr Herath and Dr Edirisinghe who run this busy department. Both spent a considerable time in the UK as part of their Urology specialist training (a requirement of the Sri Lankan Medical Board) at King's College Hospital and Eastbourne respectively with Mr Graham Watson who still visits the Hospital on a regular basis.

I was received with a warm welcome by the entire staff and got to work immediately. It was a pleasant surprise to see that at this Government Hospital they have adopted the WHO checklist. They usually have between 12-14 cases on an all day operating list so theatres run like a well oiled machine with everyone playing their part to enable theatres to run to time. Whilst the operating is being undertaken in the designated urology theatre, next to the scrub room is an area designated for diagnostic flexible cystoscopy, stent removals and if necessary in emergency cases a stent insertion. This area is run by the urology SHO equivalent but allows the opportunity for supervision/assistance if needed

On my first day I also assisted in an open pyeloplasty case, observed a TURBT using water for resection and a TRUS guided drainage of a prostatic abscess. To my delight they had lined up 3 PCNL cases for me to do under their guidance. The stone volumes for these cases were an impressive mix of partial staghorn requiring 3 tracts for clearance, a large proximal ureteric stone and a 2 tract PCNL for the third case to deal with a lower pole stone and a proximal ureteric stone that was pushed up into the kidney. The puncture is fluoroscopy guided and stones are fragmented with a home-made lithoclast which works remarkably well for these hard stones. A nephrostomy tube is usually left in as the registrars there work a 1:2 on call rota and this allows a level of reassurance and is removed the next day on discharge. The following day's list included an open radical nephrectomy, an open repair of a colovesical fistula which also required a ureteric reimplantation in a patient who had had an AP resection for metastatic bowel cancer, and an emergency laparotomy for a bowel perforation post TURBT. My second week started in Columbo where I undertook PCNL lists with Prof Chandrasekera who with his vast experience patiently took this novice through a variety of cases from a solitary PUJ stone through to my performing a PCNL on a solitary kidney on the next operating list with him. He has a very personalised approach to all his stone cases and often performs tubeless PCNL's. In this University teaching hospital all patients prior to surgery have a CT scan in contrast to Kandy teaching hospital. Alken dilators are his dilators of choice and tract size is variable. In both centres if the case dictates it more than one tract is made and whilst my stay there I often saw 2-3 tracts being made as the primary focus is to the patient stone free at the first sitting due to the sheer number of stone patients and both centres are tertiary stone centres for the island. In contrast with the UK, most staghorn stones are calcium oxalate and therefore not necessarily infective which allows multiple tracts being made where necessary without the added risk of sepsis. The lunch served on the first day was a culinary delight of typical Sri Lankan cuisine topped off with delicious ice cream to keep us going!

On each list there was at least 4 PCNL's with a good case mix and the majority of punctures I performed with him were lower pole punctures. In a couple of cases we dropped antegrade stents down, particularly the PCNL on the patient with a solitary kidney, in whom I performed a lower pole puncture and fragmented his stones! Prof Chandrasekera's patient approach to teaching was an ideal backdrop to my learning PCNL access. It was immensely rewarding when I received his feedback along with his invite to come back in the future and operate with him.

Back in Kandy armed with my new found experience and confidence I got stuck into the steady stream of PCNL cases the team had put together for me. One day was a peculiar mix of exhausting and exhilarating, having performed 5 PCNL cases with the team. One case was on a horseshoe kidney, the other was for a forgotten stent, another case for a large staghorn calculus requiring 3 tracts and a partial staghorn stone needing 2 tracts. Most patients at this resource strapped government hospital only have a pre-operative KUB x ray. The registrars here during their training become quite adept at operating the x ray machine!

In between the operating lists I spent quite a bit of time exploring this beautiful island with my family and sampling the local cuisine. There is so much I didn't get to see and have high hopes of visiting again in the future. During my time there I built some great friendships and I hope to return the training opportunities and much more in the near future. Both units were extremely friendly and being invited back in both places shows a willingness to teach and be taught!

Next stop- Nadiad, outskirts of Ahmedabad in Gujarat, India

22nd-31st August 2018

Hospital- Muljibhai Patel Urological Hospital, mentor- Dr Mahesh Desai

This hospital, built in 1978 with 140 beds is an extraordinary institute in Nadiad as it is India's first hospital dedicated entirely to Urology and Nephrology. It also undertakes kidney transplantation surgery and has received awards for the field breaking work that has been done in this field, particularly robotic transplantation surgery (da Vinci Si® surgical system) There are 6 operating theatres, 2 dedicated to renal transplant surgery and the other 4

dedicated separately to robotic, laparoscopic surgery, core/minor urology and endourology/stone surgery. Being a private hospital the theatres have been well designed and have the latest state of the art equipment. All the theatres are connected to an auditorium with over a 100 seats and is equipped with international transmission facilities. Philanthropic gestures from society and trustees of the hospital enable the upkeep of the hospital with regard to the infra structure and technological advancements as well as offering pro bono services to those patient's who cannot afford it. The mission statement of this Trust hospital is 'Every life deserves world class care'. The work performed here is inspirational and what brings it all together is the extraordinary energy and vision of Dr Mahesh Desai. There is also a well designed simulation lab for laparoscopic and PCNL surgery skills which I frequently visited in between cases.

Every day was a hive of activity starting as early as 7.30 am with 4 theatres running during the day, all led by Dr Desai. The cases ranged from RARP performed by Dr Desai who was trained in robotic surgery by his son, another eminent Urologist; laparoscopic nephrectomy, mini and standard PCNL's with laser and Shock-Pulse SE stone fragmentation, rigid and flexible URS, robotic renal transplant and laparoscopic donor nephrectomy, open pyeloplasty, AV fistula formation, urethroplasty with BMG, percutaneous nephrostomy insertion, robotic ureteric reimplantation and a diagnostic MCUG. Twice a week there were educational meetings including a MDT meeting to discuss cancer cases similar to the UK. The unit has a very strong academic track record as evident from the vast number of publications and posters visible in the lecture rooms. During my time there I met other urologists from Egypt and Haiti who like myself were there on a recognised travelling training programme. They regularly hold workshops and held a weekend mini PCNL workshop recently in September.

I am indebted to the BAUS section of endourology for allowing me this hugely rewarding educational experience. The hands on experience gained in so short a period of time is a testament to the enormous expertise of the teams I came across during my visit to Sri Lanka and India. The two very different hospitals I visited enabled me to gain first-hand experience of how health care systems in both countries differ from the UK. However, both adopted many of the practices and techniques we use here but in some areas were at the forefront in the use of emerging technology.